

REC'D 8/14/98

F.B.


Ciba

August 14, 1998

Mr. Frank Battaglia, Project Manager
USEPA Region I
Waste Management Building
90 Canal Street
Boston, MA 02114

RCRA RECORDS CENTER
FACILITY Ciba GenCorp
I.D. NO. RID001194323
FILE LOC. R-1C
OTHER _____

RE: Monthly Progress Report No. 97
Ciba Specialty Chemicals, 180 Mill Street, Cranston, RI 02905
EPA ID RID001194323

Dear Mr. Battaglia:

As required by the modified Consent Decree (CD) of September 28, 1992, I am submitting the monthly stabilization progress report for July 1998.

1.0 SUMMARY

Stabilization Plan (IRM)

- **Contaminated groundwater in the Production Area (AOC 13)** -- The groundwater extraction wells 110 and 120, as well as, the pretreatment system continued to operate with no problems. Since the initiation on September 29, 1995, the groundwater stabilization pretreatment plant has processed approximately 88 million gallons of contaminated groundwater meeting the permit wastewater discharge limits for the City of Cranston, Rhode Island.
- **Soil in the Production Area (SWMU 11)** -- The SVE was shut down on July 16, 1997, due to an odor problem from the unit that could not be immediately corrected. Ciba is now reviewing a possible corrective action that will include other technologies, as well as, the SVE, in order to remove the contamination within the SWMU 11 area.



2.0 DISCUSSION

Hydraulic Capture

Two recovery wells are now operating along the bulkhead of the former Production Area adjacent to the Pawtuxet River. Hydraulic capture was calculated for the two recovery wells, assuming a combined 66.2 GPM, and reported June 20, 1996, at 96% of groundwater before reaching the Pawtuxet River. Woodward-Clyde has completed a review of the June 1996 report and has concluded the hydraulic capture at 82%. The reduced hydraulic capture is a direct result of the reduced average pumping at recovery wells PW-110 from initial proposed 63.0 to 55 GPM (87%), and for PW-120 from initial proposed 3.2 to 2.0 GPM (67%).

After a review of the Cranston facility operations data from 1996 to the present, the following monthly maximum, minimum, and average yearly rates were calculated and included in Table 1.

Table 1

Combined Pump Rates for PW-110 and PW-120

Year	Average Yearly Rate GPM	Monthly Maximum GPM	Monthly Minimum GPM
1996	62	64	59
1997	61	65	55
1998 (7 months)	59	63	57

The initial proposed combined rate for wells PW-110 and PW-120 of 66.2 GPM was not achieved. The combined rate is dropping about 1-2 GPM per year.

A review of the influent total volatile organic concentration (TVOC) entering the treatment system has also dropped significantly since the first quarter of 1996. These results are shown in Figure 1. This phenomena of the reduction of organic contaminant concentrations within pump and treat systems is well documented in the literature. This reduction in contaminant concentrations, usually followed by a leveling off, was a conclusion reached by the USEPA after careful study of 24 such systems¹.

¹ Publication 9355.4-05, February 1992, Evaluation of Ground-Water Extraction Remedies: Phase II, Volume 1.

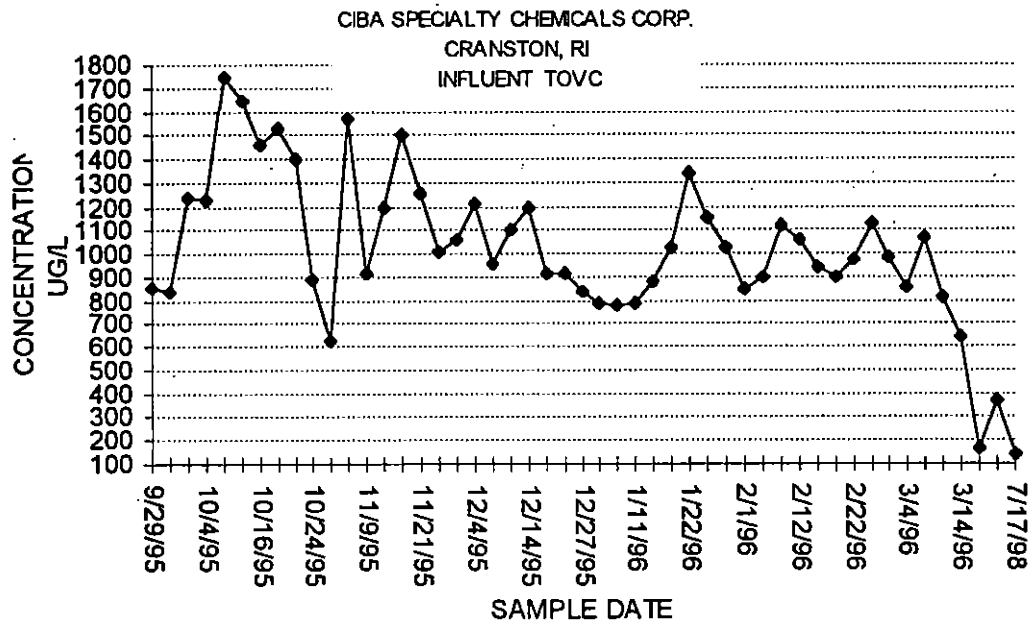


Figure 1

Due to the results showing reduced hydraulic capture we would like to discuss with the EPA what possible steps, if necessary, would be appropriate to address the lower than expected rates in recovery wells PW-110 and PW-120.

Semiannual Monitoring

Ciba completed the semiannual groundwater monitoring of the compliance wells in April 1998. The results of the sampling are included in the attached report detailing the findings for each of the monitoring wells. To date, Ciba has completed 5 sampling events dating back to March 1996 and would expect to complete a sixth event in September 1998. We propose to provide a more extensive monitoring review evaluation covering 1996-1998 in the upcoming September 1998 report.

3.0 SCHEDULE OF ACTIVITIES

- Address remediation in the SWMU 11 area (Mike Goodman).
- Address rates in recovery wells PW-110 and PW-120.

If you have questions or need additional information, please contact me at 732 914-2537 or fax 732 914-2909.

Sincerely,



Barry Cohen
Alternate Projector Coordinator

Attachments:2

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